REMARKS

Claims 2-16 and 19-22 are pending after entry of this paper. Claims 2-8 and 21 have been rejected. Claims 9-16, 19-20 and 22 have been withdrawn and claims 1 and 17-18 have been cancelled without prejudice. Applicants reserve the right to pursue withdrawn and cancelled claims in a continuing application. Claims 2, 4 and 6 have been amended.

Claim 2 has been amended to partially incorporate the subject matter of claim 4. Support may be found throughout the instant specification and previously presented claims, for example, claim 4.

Claim 4 has been amended to delete the phrase "osteoblasts, skeletal myoblasts, chondrocytes or."

Claim 6 has been amended to replace the term "nerve" with the term "neurons" based on the Examiner's suggestion (Office Action – page 3).

No new matter has been introduced by these amendments. Reconsideration and withdrawal of the pending rejections in view of the above claim amendments and below remarks are respectfully requested.

Response to Rejections under 35 U.S.C. §102

Claims 1-8 have been rejected under 35 U.S.C. §102(b) as being anticipated by Zhao, et al. (*PNAS,* 100: 2426-2431, 2003). Specifically, the Examiner contends that Zhao allegedly discloses the isolation of pluripotent stem cells (PSC) from human peripheral blood monocytes that resemble fibroblasts and express the monocytic and hematopoietic cellular differentiation stem cell markers, such as CD14, CD34 and CD45, and the presence of collagen

type I would be inherent (Office Action – page 4). Moreover, according to the Examiner, Zhao further discloses that human peripheral blood cells containing monocytes when cultured under specific conditions, differentiate into macrophages, lymphocytes, epithelial cells, neuronal cells, endothelial cells and hepatocytes (Office Action – page 5). Therefore, the Examiner maintains that Zhao allegedly anticipates the claimed invention and the burden to prove that inherency is not involved falls on the applicants (Office Action – page 6). Applicants respectfully disagree.

However, in order to expedite prosecution and without disclaimer of or prejudice to the subject matter recited therein, applicants have amended claim 2 to partially incorporate the subject matter of claim 4 by reciting "wherein the cell is able to differentiate into osteoblasts, skeletal myoblasts or chondrocytes." In addition, applicants submit herewith a declaration under 37 CFR §1.132 by Dr. Masataka Kuwana (one of the inventors). The declaration discloses:

(1) results of experiments to culture MOMC under the differentiation induction conditions of PSC (paragraph 7), and

(2) results of check-up experiments of the method of Zhao, et al. (paragraph 8) are described.

The results of experiments (1) clearly show that MOMCs cultured under the differentiation induction conditions of Zhao, et al. do not differentiate into neuronal cells, epithelial cells or hepatocytes. On the other hand, PSC under the conditions of Zhao et al. as described are able to differentiate into neuronal cells, epithelial cells or hepatocytes. Thus, one skilled in the art would not and could not consider that MOMCs of the instant invention are the same as the PSCs of Zhao, et al.

Furthermore, as described in the enclosed declaration, Dr. Kuwana attempted to prepare PSCs with the method disclosed by Zhao, et al. However, the resultant "cells morphologically resembling fibroblasts" do not show all of the characteristics described in the

Zhao, et al. reference, which itself casts doubt on the reproducibility of the method of Zhao, et al. Moreover, these "cells morphologically resembling fibroblasts" prepared by the method of Zhao, et al. do not differentiate into osteoblasts, skeletal myoblasts or chondrocytes under the differentiation induction conditions of MOMC set forth in the instant application (see Example 22 of the specification). Therefore, these results would imply to one skilled in the art that PSCs of Zhao, et al. are unable to differentiate into osteoblasts, skeletal myoblasts or chondrocytes.

In light of these experimental results, inventor's declaration and amendments to claims, applicants respectfully assert that PSCs are unable to differentiate into "osteoblasts, skeletal myoblasts or chondrocytes" as experimentally confirmed and the ability to differentiate into these cells can not be asserted to be inherent as suggested by the Examiner. Furthermore, MOMCs cultured under the differentiation induction conditions of Zhao, et al. as discussed above do not differentiate into neuronal cells, epithelial cells or hepatocytes, whereas, PSCs do. Hence, MOMC currently claimed in the instant invention is not anticipated by PSC of Zhao, et al. expressly or inherently because Zhao does not disclose each and every element of the claims as presented herewith. Reconsideration and withdrawal of the rejections under 35 U.S.C. §102(b) of claims 1-8 as being anticipated by Zhao, et al. are respectfully requested.

Response to Rejections under 35 U.S.C. §103

Claim 21 has been rejected under 35 U.S.C. §103(a) as being unpatentable over Zhao, et al. (*PNAS* 100: 2426-2431, 2003) in view of Pujol, et al. (*Differentiation* 65: 287-300, 2000). Specifically, the Examiner contends that Zhao allegedly discloses the pluripotent stem cells expressing CD14, CD34 and CD45 that are obtained by culturing peripheral blood mononuclear cells. The Examiner attempts to reach the claimed invention by combining the

teachings of Zhao, et al. and Pujol, et al. According to the Examiner, Pujol allegedly teaches culturing CD14 monocytes derived from PBMC on fibronectin-coated tissue culture plates (page 288, "Cell Culture") and one skilled in the art would be motivated to combine the teachings from the two publications to arrive at the claimed invention disclosed in claim 21. Applicants respectfully disagree.

Applicants assert that contrary to the Examiner's contention, Zhao does not disclose MOMC of the instant invention as presented in the arguments above. Therefore, neither the combination of, nor Zhao, et al. and Pujol, et al. alone, suggests the claimed elements such as the monocyte-derived multipotent cells (MOMC). Pujol does not remedy the deficiencies in the monocyte derived cells (PSC) of Zhao, et al. Therefore, the combination of Zhao, et al. and Pujol, et al. does not make obvious the claimed invention. Applicants respectfully request reconsideration and withdrawal of the 35 U.S.C. §103(a) rejection of claim 21 in view of the aforementioned remarks and amendments to the claims.

Dependent Claims

The applicants have not independently addressed all of the rejections of the dependent claims. The applicants submit that for at least similar reasons as to why independent claim 2 from which all of the dependent claims 3-8 and 21 depend are believed allowable as discussed *supra*, the dependent claims are also allowable. The applicants however, reserve the right to address any individual rejections of the dependent claims and present independent bases for allowance for the dependent claims should such be necessary or appropriate.

Thus, applicants respectfully submit that the invention as recited in the claims as presented herein is allowable over the art of record, and respectfully request that the respective rejections be withdrawn.

CONCLUSION

Based on the foregoing amendments and remarks, the applicants respectfully request reconsideration and withdrawal of the pending rejections and allowance of this application. The applicants respectfully submit that the instant application is in condition for allowance. Entry of the amendment and an action passing this case to issue is therefore respectfully requested. In the event that a telephone conference would facilitate examination of this application in any way, the Examiner is invited to contact the undersigned at the number provided. Favorable action by the Examiner is earnestly solicited.

AUTHORIZATION

The Commissioner is hereby authorized to charge any additional fees which may be required for consideration of this Amendment to Deposit Account No. **13-4500**, Order No. 4439-4036.

In the event that an extension of time is required, or which may be required in addition to that requested in a petition for an extension of time, the Commissioner is requested to grant a petition for that extension of time which is required to make this response timely and is hereby authorized to charge any fee for such an extension of time or credit any overpayment for an extension of time to Deposit Account No. **13-4500**, Order No. 4439-4036.

Respectfully submitted,
MORGAN & FINNEGAN, L.L.P.

Dated: October 10, 2007

By: _____
Evelyn M. Kwon
Registration No. 54,246

Correspondence Address:
MORGAN & FINNEGAN, L.L.P.
3 World Financial Center
New York, NY 10281-2101
(212) 415-8700 Telephone
(212) 415-8701 Facsimile

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s):	Masataka KUWANA, et al.		
		Group Art Unit:	1649
Serial No.:	10/549,707		
		Examiner:	Dutt, Aditi
Filed:	October 27, 2005		
		Confirmation:	2198

For: MONOCYTE-ORIGIN MULTIPOTENT CELL MOMC

DECLARATION UNDER 37 C.F.R. §1.132

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

This is a Declaration under 37 C.F.R. §1.132 by Masataka Kuwana, MD, Ph.D. in the above-identified application.

I, the undersigned, Masataka Kuwana, declare and state that:

1. I am a co-inventor of the subject patent application having serial no. 10/549,707.

2. My education and professional experience as an expert in the area of tissue engineering are set forth on the attached copy of my Curriculum Vitae.

3. I have read and understand U.S. Patent Application Serial No. 10/549,707, entitled "MONOCYTE-ORIGIN MULTIPOTENT CELL MOMC," and I submit this Declaration in its support.

4. I have read and understand the August 10, 2007 Final Official Action issued in the above-identified case.

5. I have read and understand the publication of Zhao, et al. (*PNAS*, 100: 2426-2431, 2003) cited by the Examiner.

6. In particular, I understand that in the August 10, 2007 Final Official Action, the Examiner has rejected claims 2-8 because they are anticipated by Zhao, et al. Specifically, the Examiner states that the Zhao, et al. reference teaches the isolation of pluripotent stem cells (PSC) from human peripheral blood monocytes that resemble fibroblasts and express the monocytic and hematopoietic cellular differentiation stem cell markers, such as CD14, CD34 and CD45. The Zhao, et al. reference allegedly further discloses that human peripheral blood cells containing monocytes, when cultured under specific conditions, differentiate into macrophages, lymphocytes, epithelial, neuronal, endothelial and hepatocytes (Final Office Action- pages 3-6). As a person skilled in the art, I respectfully disagree with the Examiner's rejection.

7. The inventors of the instant application attempted the differentiation induction of MOMC into T-cells using IL-2, as described in Zhao, et al. The expression of CD3 was analyzed with a flow cytometry technique. The results, as shown in Figure 1 below, demonstrate that CD3 was not expressed. Thus, MOMC does not differentiate into T-cell using the method described in Zhao, et al.. Furthermore, the inventors attempted the differentiation induction of

MOMC into neuronal cells, epithelial cells and hepatocytes using NGF, EGF and HGF, respectively. When MOMC was immunostained with an immunoenzymatic method, no brown coloration of MOMC was observed. As shown in Figure 1 below, MAP2 (a marker of neuronal cells), keratin (a marker of epithelial cells), and albumin (a marker of hepatocytes), were not expressed. Hence, it was shown that MOMC does not differentiate into neuronal cells, epithelial cells or hepatocytes. These results show that MOMC are clearly distinct from PSC.

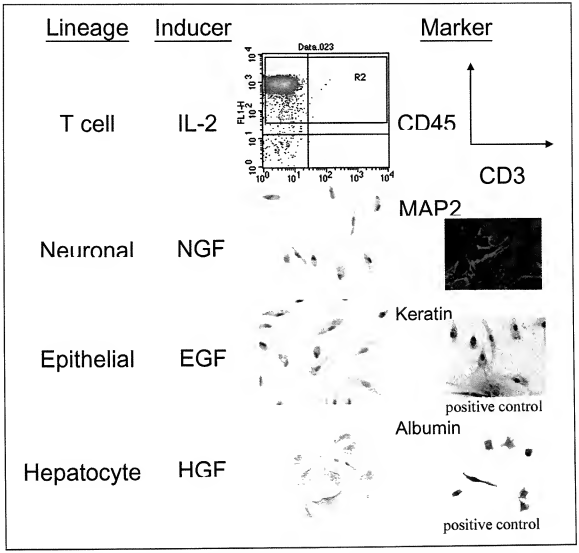

Figure 1: Results of experiments concerning differentiation abilities of human MOMC cultured under the differentiation conditions of PSC into T-cells, neuronal cells, epithelial cells and hepatocytes.

8. Finally, the inventors have also carried out a check experiment, and the results of Zhao, et al. were not reproducible[1]. The steps of the check experiments carried out by the inventors are set forth here. Monocytes were cultured according to the method of Zhao, et

[1] Reproducibility is solely based on the disclosure of Zhao, et al. and does not mean that there is no reproducibility in Zhao, et al. when special techniques or materials are used but not disclosed in their article.

al.(with medium containing M-CSF and LIF), and cells morphologically resembling fibroblasts were observed. However, the frequency of the "cells that morphologically resembled fibroblasts" was much lower than that described in Zhao, et al., and though their cloning was attempted through the method described in Zhao, et al, the cells did not proliferate and clone. The data, therefore, which should be obtained from their separation, purification and analysis were not available. Moreover, their flow cytometry analysis showed a slight expression of CD34 in the cells, which is within the margin of error of flow cytometry analysis. The expression of CD34 was not detected with either immunostaining or the RT-PCR method as shown in Zhao, et al. Furthermore, the inventors confirmed that the cells cultured according to the method of Zhao, et al., which include the "cells that morphologically resembled fibroblasts," did not express CD3 in the presence of IL-2, vWF in the presence of EGF, or AFP in the presence of HGF. These cells also did not differentiate into osteoblasts, skeletal myoblasts or chondrocytes under the differentiation induction conditions of MOMC set forth in the instant application.

9. Zhao et al. disclose pluripotent stem cells (PSC) which express CD14, CD34 and CD45. Zhao et al. also describe that PSC differentiate into macrophages, lymphocytes, epithelial cells, neuronal cells, endothelial cells and hepatocytes. However, the Monocyte-Origin Multipotent Cells (MOMC) of the instant invention are much different from PSC of Zhao et al. in their properties, especially their differentiation abilities as demonstrated in Table 1 below.

TABLE 1.

	PSC	MOMC
Differentiation Abilities		
T-lymphocyte	+	-
epithelial cell	+	-
endothelial cell	+	+
neuronal cell	+	Culture under NGF stimulation (culture condition of PSC): - Coculture with rat neurons: +
hepatocyte	+	-
mesenchymal cell	not reported	+
proliferation from a single cell (cloning)	possible	impossible

The "+" and "-" signs show whether human MOMC cultured under the differentiation condition of PSC has a differentiation ability or not.

10. In view of the evidence presented above, there is a clear difference in differential abilities between MOMC and PSC. Furthermore, the cells of Zhao, et al. do not express vWF in the presence of EGF and do not differentiate into osteoblasts, skeletal myoblasts or chondrocytes under the differentiation induction conditions of MOMC. Therefore, one skilled in the art would conclude that MOMC is clearly distinct from said "cells that morphologically resembled fibroblasts" (Zhao, et al. page 2427, column 1, 3rd paragraph).

11. Thus, it is my experience and my opinion, as one skilled in the art of tissue engineering, that MOMC and PSC cells are not identical, in view of the differences in the differential abilities of these cells. These differences of differential abilities necessarily result in the differences of diseases for which these cells will be used as a transplant in the future. It is

clear from these points that the instant invention could not be anticipated by the teachings of Zhao, et al.

12. I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application of any patent issuing thereon.

Respectfully submitted,

Date : _____

Masataka Kuwana

July 1, 2007

CURRICULUM VITAE

NAME: Masataka Kuwana

ACADEMIC TITLE: Associate Professor

SEX: Male

BIRTH DATE: May 16, 1963

BIRTHPLACE: Tokyo, Japan

CURRENT ADDRESS:
Division of Rheumatology, Department of Internal Medicine, Keio University School of Medicine, 35 Shinanomachi, Shinjuku-ku, Tokyo 160-8582, Japan.
TEL: 81-3-5363-3786 FAX: 81-3-5379-5037
E-mail: kuwanam@sc.itc.keio.ac.jp

EDUCATION:

Institution and Location	Degree	Year Conferred	Field of Study
Keio University School of Medicine Tokyo, Japan	MD	May, 1988	Medicine
Keio University School of Medicine Tokyo, Japan	PhD	January, 1992	Cell biology Immunology

BOARD CERTIFIED MEMBERS:

1994 Board Certified Member of the Japanese Society of Internal Medicine
1995 Board Certified Member of the Japanese College of Rheumatology
1995 Fellow of the Japanese Society of Internal Medicine
2005 Instructor of the Japanese College of Rheumatology

RESEARCH AND PROFESSIONAL EXPERIENCE:

1988-1992 Graduate student, Keio University School of Medicine, Tokyo, Japan
1992-1993 Postdoctoral Fellow, Division of Rheumatology, Department of Medicine, Keio University School of Medicine, Tokyo, Japan
1993-1996 Postdoctoral Research Fellow, Division of Rheumatology and Clinical Immunology, Department of Medicine, University of Pittsburgh School of Medicine, Pittsburgh, PA

1996-1998	Instructor, Division of Rheumatology, Department of Medicine, Keio University School of Medicine, Tokyo, Japan
1998-2000	Instructor, Institute for Advanced Medical Research, Keio University School of Medicine, Tokyo, Japan
2000-2005	Assistant Professor, Institute for Advanced Medical Research, Keio University School of Medicine, Tokyo, Japan
2006-Present	Associate Professor and Chief, Division of Rheumatology, Department of Internal Medicine, Keio University School of Medicine, Tokyo, Japan

AWARD:

	Source	Type of Support
1993-1994	Arthritis Foundation, Western Pennsylvania Chapter	Research Fellowship Award
1995	American Clinical Research Meeting	Travel Award
1995	American College of Rheumatology	Senior Rheumatology Scholar Award
1998	Naito Foundation	Research Award
1999	Japanese Intractable Diseases Foundation	Research Prize
2000	Sakaguchi Research Foundation	Research Award
2001	Ichiro Kanehara Foudation	Research Prize
2001	Mochida Memorial Foundation	Research Award
2001	Uehara Life Science Foundation	Research Award
2002	Keio University School of Medicine Sanshikai	Yong Investigator Award
2002	Terumo Life Science Foundation	Research Award
2002	Nagao Memorial Fund	Research Prize
2003	Japan Rheumatism Association	Research Award
2004	Japanese Society for Connective Tissue Research	Otaka Memorial Prize
2005	Keio University Intellectual Program Center	Honorary Award
2005	Takeda Science Foundation	Research Award
2005	Keio University School of Medicine Sanshikai	Kitajima Memorial Prize
2007	International Systemic Sclerosis	Travel Award

	Forum 2007	
2007	Japan Rheumatism Foundation	Research Prize

EDITORIAL BOARD:

2001-2005	Editorial Board, Connective Tissue
2002-2005	Editorial Board, Japanese Journal of Clinical Immunology
2004-now	International Editor, Drugs
2005-now	Advisory Editor, Arthritis and Rheumatism
2006-now	Editorial Board, Journal of Infectious Diseases

MEMBER:

American College of Rheumatology
American Association of Immunologists
New York Academy of Science
Japanese Society of Internal Medicine
Japanese College of Rheumatology
Japanese Society for Immunology
Japan Society for Clinical Immunology
Japanese Society of Clinical Hematology
Japanese Society for Connective Tissue Research
Japanese Society for *Helicobacter* Research
Japanese Society of Inflammation and Regeneration

BIBLIOGRAPHY:

1. Kuwana M, Suzuki H, Takayama S, and Tominaga N. Accelerated hypertension in a patient with mixed connective tissue disease (letter). *J. Rheumatol.* 1992; 19(5): 826-828.

2. Kaburaki J, Kuwana M, Ogasawara T, Takano M, Funatsu Y, and Tojo T. Specificity of antibodies to single-stranded (ss) DNA in SLE patients with anti-phospholipid syndrome. *Keio. J. Med.* 1992; 41(1): 10-15.

3. Kuwana M, Wakino S, Yoshida T, and Homma M. Retroperitoneal fibrosis associated with aortitis. *Arthritis Rheum.* 1992; 35(10): 1245-1247.

4. Kaburaki J, Lee CC, Kuwana M, Tojo T, Ikeda Y, Takano M, and Funatsu Y. Initial predictors of survival in patients with systemic sclerosis (scleroderma). *Keio. J. Med.* 1992; 41(2): 141-145.

5. Kaburaki J, Kuramochi S, Kawai S, Kuwana M, Tojo T, Takano M, Funatsu Y, and Hosoda Y. Two cases of systemic sclerosis with hepatocellular failure due to primary biliary cirrhosis. *Connective Tissue.* 1992; 23(3): 125-131.

6. Kuwana M, Kaburaki J, Mimori T, Tojo T, and Homma M. Autoantibody reactive with three classes of RNA polymerases in sera from patients with systemic sclerosis. *J. Clin. Invest.* 1993; 91(4): 1399-1404.

7. Kuwana M, Mimori T, Hama N, Kaburaki J, Okano T, and Tojo T. Clinical significance of anti-nucleolar antibodies identified by immunoprecipitation assays in sera from patients with systemic sclerosis. *Jpn. J. Rheumatol.* 1993; 4(4): 265-275.

8. Kuwana M, Kaburaki J, Okano Y, Inoko H, and Tsuji K. The HLA-DR and DQ genes control the autoimmune response to DNA topoisomerase I in systemic sclerosis (scleroderma). *J. Clin. Invest.* 1993; 92 (9): 1296-1301.

9. Kuwana M, Kaburaki J, Mimori T, Tojo T, and Homma M. Autoantigenic epitopes on DNA topoisomerase I: clinical and immunogenetic associations in systemic sclerosis. *Arthritis Rheum.* 1993; 36(10): 1406-1413.

10. Kuwana M, Kaburaki J, Okano Y, Tojo T, and Homma M. Clinical and prognostic associations based on serum antinuclear antibodies in Japanese patients with systemic sclerosis. *Arthritis Rheum.* 1994; 37(1): 75-83.

11. Satoh M, Akizuki M, Kuwana M, Mimori T, Yamagata H, Yoshida S, Homma M, Yamamoto T, and Sasazuki T. Genetic and immunological differences between Japanese patients with diffuse scleroderma and limited scleroderma. *J. Rheumatol.* 1994; 21(1): 111-114.

12. Wakino S, Kuwana M, Tojo T, and Kawai Y. Serial lymphocyte subpopulation analysis in

peripheral blood from a patient with amyopathic dermatomyositis (letter). *Br. J. Rheumatol.* 1994; 33(4): 498-499.

13. Kuwana M, Okano Y, Kaburaki J, Tojo T, and Medsger TA Jr. Racial differences in the distribution of systemic sclerosis-related serum antinuclear antibodies. *Arthritis Rheum.* 1994; 37(6): 902-906.

14. Kaburaki J, Kuwana M, Ikeda Y, Yamamoto M, Kawai S, and Matsuura E. Cofactor (β2-glycoprotein I)-dependent anticardiolipin antibodies and thrombosis. *J. Rheumatol.* 1994; 21(7): 1371-1372.

15. Satoh M, Kuwana M, Ogasawara T, Ajmani AK, Langdon JJ, Kimpel D, Wang J, and Reeves WH. Association of autoantibodies to topoisomerase I and the phosphorylated (IIO) form of RNA polymerase II in Japanese scleroderma patients. *J. Immunol.* 1994; 153(12): 5838-5848.

16. Kuwana M, Okano Y, Kaburaki J, Tsuji K, and Inoko H. MHC class II associations with anti U1 small nuclear ribonucleoprotein antibody: relationship to immunoreactivity with individual constituent proteins. *Arthritis Rheum.* 1995; 38(3): 396-405.

17. Kuwana M, Kaburaki J, Hirakata M, Tojo T, Handa M, and Ikeda Y. Thrombocytopenia responsive to warfarin in a patient with systemic sclerosis - systemic lupus erythematosus overlap. *Clin. Exp. Rheumatol.* 1995; 13(1): 103-106.

18. Kaburaki J, Kuwana M, Okano Y, Hirakata M, Tojo T, and Ikeda Y. Polyarthralgia suggests poor prognosis in systemic sclerosis with both pulmonary fibrosis and anti-DNA topoisomerase I antibodies. *Connective Tissue.* 1995; 26(3): 317-318.

19. Kaburaki J, Kuwana M, Yamamoto M, Kawai S, Matsuura E, and Ikeda Y. Disease distribution of β2-glycoprotein I-dependent anticardiolipin antibodies in rheumatic diseases. *Lupus.* 1995; 4 (suppl): S27-S31.

20. Kuwana M, Medsger TA Jr, and Wright TM. T cell proliferative response induced by DNA topoisomerase I in patients with systemic sclerosis and healthy donors. *J. Clin. Invest.* 1995; 96(1): 586-596.

21. Satoh M, Tokuhira M, Hama N, Hirakata M, Kuwana M, Akizuki M, Ichikawa Y, Ogawa S, and Homma M. Massive pericardial effusion in scleroderma: review of 5 cases. *Br. J. Rheumatol.* 1995; 34(6): 564-567.

22. Stojanov L, Satoh M, Dooley M, Kuwana M, Jennette JC, and Reeves WH. Autoantibodies to topoisomerase I in a patient with systemic lupus erythematosus without features of scleroderma. *Lupus.* 1995; 4(3): 314-317.

23. Kuwana M, Medsger TA Jr, and Wright TM. T - B cell collaboration is essential for the autoantibody response to DNA topoisomerase I in systemic sclerosis. *J. Immunol.* 1995;

155(5): 2703-2714.

24. Kuwana M, Medsger TA Jr, and Wright TM. Detection of anti-DNA topoisomerase I antibody by an enzyme-linked immunosorbent assay using overlapping recombinant polypeptides. *Clin. Immunol. Immunopathol.* 1995; 76(3): 266-278.

25. Kuwana M, Okano Y, Kaburaki J, and Inoko H. HLA class II genes associated with anticentromere antibody in Japanese patients with systemic sclerosis (scleroderma). *Ann. Rhuem. Dis.* 1995; 54(12): 983-987.

26. Kaburaki J, Kuwana M, Yamamoto M, Kawai S, Matsuura E, and Ikeda Y. Clinical significance of phospholipid-dependent anti-β2-glycoprotein I (β2-GPI) antibodies in systemic lupus erythematosus. *Lupus.* 1995; 4(4): 472-476.

27. Kuwana M, Fujii T, Mimori T, and Kaburaki J. Enhancement of anti-DNA topoisomerase I autoantibody response after lung cancer in patients with systemic sclerosis: a report of two cases. *Arthritis Rheum.* 1996; 39(4): 686-691.

28. Kuwana M, Okano Y, Kaburaki J, and Inoko H. Clinical correlations with HLA type in Japanese patients with connective tissue disease and anti-U1 small nuclear RNP antibodies. *Arthritis Rheum.* 1996; 39(6): 938-942.

29. Kaburaki J, Kuwana M, Yamamoto M, Kawai S, Matsuura E, and Ikeda Y. Phospholipid dependent anti-β2-glycoprotein I (β2-GPI) antibodies and antiphospholipid syndrome. *Intern. Med.* 1996; 35(2): 105-110.

30. Okano Y, Targoff IN, Oddis CV, Fujii T, Kuwana M, Tsuzaka K, Hirakata M, Mimori T, Craft J, and Medsger TA Jr. Anti-U5 small nuclear ribonucleoprotein (snRNP) antibodies: a rare anti-U snRNP specificity. *Clin. Immunol. Immunopathol.* 1996; 81(1): 41-47.

31. Kaburaki J, Kuramochi S, Fujii T, Kuwana M, Tojo T, Ikeda Y, and Hosoda Y. Nodular regenerative hyperplasia of the liver in a patient with systemic sclerosis. *Clin. Rheumatol.* 1996; 15(6): 613-616.

32. Kuwana M, Medsger TA Jr, and Wright TM. Highly restricted TCR αβ usage by autoreactive human T cell clones specific for DNA topoisomerase I: recognition of an immunodominant epitope. *J. Immunol.* 1997; 158(1): 485-491.

33. Kameda H, Kuwana M, Hama N, Kaburaki J, and Homma M. Coexistence of serum anti DNA topoisomerase I and anti-Sm antibodies: a report of 3 cases. *J. Rheumatol.* 1997; 24(2): 400-403.

34. Kaburaki J, Kuwana M, Yamamoto M, Kawai S, and Ikeda Y. Clinical significance of anti annexin V antibodies in patients with systemic lupus erythematosus. *Am. J. Hematol.* 1997; 54(2): 209-213.

35. Kameda H, Pandey JP, Kaburaki J, Inoko H, and Kuwana M. Immunoglobulin allotype

gene polymorphisms in systemic sclerosis: interactive effect of MHC class II and KM genes on anticentromere antibody production. *Ann. Rheum. Dis.* 1998; 57(6): 366-370.

36. Kuwana M, Kaburaki J, and Ikeda Y. Autoreactive T cells to platelet GPIIb-IIIa in immune thrombocytopenic purpura: role in production of anti-platelet autoantibody. *J. Clin. Invest.* 1998; 102(7): 1393-1402.

37. Kaburaki J, Kuwana M, and Ikeda Y. Anti-cardiolipin-β2-GPI complex antibodies in idiopathic thrombocytopenic purpura (letter). *Intern. Med.* 1998; 37(9): 795-796.

38. Kuwana M, Okano Y, Kaburaki J, Medsger TA Jr, and Wright TM. Autoantibodies to RNA polymerases recognize multiple subunits and demonstrate cross-reactivity with RNA polymerase complexes. *Arthritis Rheum.* 1999; 42(2): 275-284.

39. Kuwana M, Kaburaki J, Arnett FC, Howard RF, Medsger TA Jr, and Wright TM. Influence of ethnic background on clinical and serologic features in patients with systemic sclerosis and anti-DNA topoisomerase I antibody. *Arthritis Rheum.* 1999; 42(3): 465-474.

40. Kuwana M, Inoko H, Kameda H, Nojima T, Sato S, Nakamura K, Ogasawara T, Hirakata M, Ohosone Y, Kaburaki J, Okano Y, and Mimori T. Association of human leukocyte antigen class II genes with autoantibody profiles, but not with disease susceptibility in Japanese patients with systemic sclerosis. *Intern. Med.* 1999; 38(4): 336-344.

41. Kuwana M, Kaburaki J, Medsger TA Jr, and Wright TM. An immunodominant epitope on DNA topoisomerase I is conformational in nature: heterogeneity in its recognition by systemic sclerosis sera. *Arthritis Rheum.* 1999; 42(6): 1179-1188.

42. Hattori N, Kuwana M, Kaburaki J, Mimori T, Ikeda Y, and Kawakami Y. T cells that are autoreactive to β2-glycoprotein I in patients with antiphospholipid syndrome and healthy individuals. *Arthritis Rheum.* 2000; 43(1): 65-75.

43. Nishifuji K, Amagai M, Kuwana M, Iwasaki T, and Nishikawa T. Detection of antigen specific B cells in patients with pemphigus vulgaris by enzyme-linked immunospot assay: requirement of T cell collaboration for autoantibody production. *J. Invest. Dermatol.* 2000; 114(1): 88-94.

44. Kuwana M, Kaburaki J, Mimori T, Kawakami Y, and Tojo T. Longitudinal analysis of autoantibody response to topoisomerase I in systemic sclerosis. *Arthritis Rheum.* 2000; 43(5): 1074-1084.

45. Hata R, Akai J, Kimura A, Ishikawa O, Kuwana M, and Shinkai H. Association of functional microsatellites in the human type I collagen α2 chain (*COL1A2*) gene with systemic sclerosis. *Biochem. Biophys. Res. Commun.* 2000; 272(1): 36-40.

46. Kuwana M, Medsger TA Jr, and Wright TM. Analysis of soluble and cell surface factors regulating anti-DNA topoisomerase I autoantibody production demonstrates synergy

between Th1 and Th2 autoreactive cells. *J. Immunol.* 2000; 164(12): 6138-6146.

47. Kuwana M, Kaburaki J, Pandey JP, Murata M, Kawakami Y, Inoko H, and Ikeda Y. HLA class II alleles in Japanese patients with immune thrombocytopenic purpura: associations with anti-platelet glycoprotein antibodies and responses to splenectomy. *Tissue Antigens.* 2000; 56(10): 337-343.

48. Kajihara M, Kuwana M, Tokuda H, Yamane K, Kubo M, Hirakata M, and Mimori T. Myositis and interstitial lung disease associated with autoantibody to a transfer RNA-related protein Wa. *J. Rheumatol.* 2000; 27(11): 2707-2710.

49. Ogawa Y, Yamazaki K, Kuwana M, Mashima Y, Nakamura Y, Ishida S, Toda I, Oguchi Y, Tsubota K, Okamoto S, and Kawakami Y. A significant role of stromal fibroblasts in rapidly progressive dry eye in patients with chronic GVHD. *Invest. Ophthalmol. Vis. Sci.* 2001; 42(1): 111-119.

50. Toda I, Kuwana M, Tsubota K, and Kawakami Y. Lack of evidence for an increased microchimerism in circulation of patients with Sjögren's syndrome. *Ann. Rheum. Dis.* 2001; 60(3): 248-253.

51. Kuwana M, and Kaburaki J. Longitudinal analysis of autoantibody response to topoisomerase I in systemic sclerosis: Reply (letter). *Arthritis Rheum.* 2001; 44(3): 737-738.

52. Tan FK, Wang N, Kuwana M, Chakraborty R, Bona CA, Milewicz DM, and Arnett FC. Association of fibrillin-1 single-nucleotide polymorphism haplotypes with systemic sclerosis in Choctaw and Japanese populations. *Arthritis Rheum.* 2001; 44(4): 893-901.

53. Ogawa Y, Okamoto S, Kuwana M, Mori T, Watanabe R, Nakajima T, Yamada M, Mashima Y, Tsubota K, and Oguchi Y. Successful treatment of dry eye in two patients with chronic graft-versus-host disease with systemic administration of FK506 and corticosteroids: case reports. *Cornea.* 2001; 20(4): 430-434.

54. Yamane K, Ihn H, Kubo M, Kuwana M, Asano Y, Yazawa N, and Tamaki K. Antibodies to Th/To ribonucleoprotein in patients with localized scleroderma. *Rheumatology.* 2001; 40(6): 683-686.

55. Kuwana M, Kaburaki J, Kitasato H, Kato M, Kawai S, Kawakami Y, and Ikeda Y. Immunodominant epitopes on glycoprotein IIb-IIIa recognized by autoreactive T cells in patients with immune thrombocytopenic purpura. *Blood.* 2001; 98(1): 130-139.

56. Kuwana M, Feghali CA, Medsger TA Jr, and Wright TM. Autoreactive T cells to topoisomerase I in monozygotic twins discordant for systemic sclerosis. *Arthritis Rheum.* 2001; 44(7): 1654-1659.

57. Kuwana M, Toda I, and Ogawa Y. Fetal microchimerism in Sjögren's syndrome:

Authors' reply (letter). *Ann. Rheum. Dis.* 2001; 60(9): 897-898.

58. Kuwana M, Kaburaki J, Wright TM, Kawakami Y, and Ikeda Y. Induction of antigen-specific human $CD4^+$ T cell anergy by peripheral blood DC2 precursors. *Eur. J. Immunol.* 2001; 31(9): 2547-2557.

59. Arai T, Yoshida K, Kaburaki J, Inoko H, Ikeda Y, Kawakami Y, and Kuwana M. Autoreactive $CD4^+$ T cell clones to β2-glycoprotein I in patients with antiphospholipid syndrome: preferential recognition of the major phospholipid-binding site. *Blood.* 2001; 98(6): 1889-1896.

60. Suzuki S, Kuwana M, Yasuoka H, Tanaka K, Fukuuchi Y, and Kawakami Y. Heterogeneous immunogenetic background in Japanese adults with myasthenia gravis. *J Neurol Sci.* 2001; 189(1-2): 59-64.

61. Kuwana M, Okano T, Ogawa Y, Kaburaki J, and Kawakami Y. Autoantibodies to the amino-terminal fragment of β-fodrin expressed in glandular epithelial cells in patients with Sjögren's syndrome. *J. Immunol.* 2001; 167(9): 5449-5456.

62. Yamane K, Ihn H, Kubo M, Kuwana M, Asano Y, Yazawa N, and Tamaki K. Anti-U1RNP antibodies in patients with localized scleroderma. *Arch. Dermatol. Res.* 2001; 293(9):455-459.

63. Kubo M, Ihn H, Kuwana M, Yamane K, Yazawa N, and Tamaki K. Prevalence in myositis of antibodies recognizing anti-U3 RNA probably in a novel complex with 22/25 kD protein and not fibrillarin. *Clin. Exp. Immunol.* 2001; 126(2): 339-344.

64. Yamane K, Ihn H, Kubo M, Asano Y, Yazawa N, Tamaki K, and Kuwana M. Anti-U3 snRNP antibodies localised scleroderma (letter). *Ann. Rheum. Dis.* 2001; 60(12): 1157-1158.

65. Fujii T, Nojima T, Yasuoka H, Satoh S, Nakamura K, Kuwana M, Suwa A, Hirakata M, and Mimori T. Cytokine and immunogenetic profiles in Japanese patients with adult Still's disease: association with chronic articular disease. *Rheumatology.* 2001; 40(12): 1398-1404.

66. Yoshida K, Arai T, Kaburaki J, Ikeda Y, Kawakami Y, and Kuwana M. Restricted T cell receptor β-chain usage by T cells autoreactive to β2-glycoprotein I in patients with antiphospholipid syndrome. *Blood.* 2002; 99(7): 2499-2504.

67. Kuwana M, Okazaki Y, Kaburaki J, Kawakami Y, and Ikeda Y. Spleen is a primary site for activation of platelet-reactive T and B cells in patients with immune thrombocytopenic purpura. *J. Immunol.* 2002; 168(7): 3675-3682.

68. Kubo M, Ihn H, Kuwana M, Asano Y, Tamaki T, Yamane K, and Tamaki K. Anti-U5 snRNP antibody as a possible serological marker for scleroderma-polymyositis overlap.

Rheumatology. 2002; 41(5): 531-534.

69. Kuwana M, Okazaki Y, Kajihara M, Kaburaki J, Miyazaki H, Kawakami Y, and Ikeda Y. Autoantibody to c-Mpl (thrombopoietin receptor) in systemic lupus erythematosus: relationship to thrombocytopenia with megakaryocytic hypoplasia. *Arthritis Rheum.* 2002; 46(8): 2148-2159.

70. Kuwana M, Kimura K, Hirakata M, Kawakami Y, and Ikeda Y. Differences in anti-Th/To autoantibody response between systemic sclerosis and other autoimmune diseases. *Ann. Rheum. Dis.* 2002; 61(9): 842-846.

71. Kuwana M, Kimura K, and Kawakami Y. Identification of an immunodominant epitope on RNA polymerase III recognized by systemic sclerosis sera: application to enzyme-linked immunosorbent assay. *Arthritis Rheum.* 2002; 46(10): 2742-2747.

72. Kuwana M. Induction of anergic and regulatory T cells by plasmacytoid dendritic cells and other dendritic cell subsets. *Hum. Immunol.* 2002; 63(12): 1156-1163.

73. Kuwana M, Kawakami Y, and Ikeda Y. Suppression of autoreactive T-cell response to glycoprotein IIb/IIIa by blockade of CD40/CD154 interaction: implications for treatment of immune thrombocytopenic purpura. *Blood.* 2003; 101(2): 621-623.

74. Kuwana M, Okazaki Y, Kaburaki J, and Ikeda Y. Detection of circulating B cells secreting platelet-specific autoantibody is a sensitive and specific test for the diagnosis of autoimmune thrombocytopenia. *Am. J. Med.* 2003; 114(4): 322-325.

75. Suzuki S, Tanaka K, Yasuoka H, Fukuuchi Y, Kawakami Y, and Kuwana M. Autoreactive T cells to the $P3A^{+}$ isoform of AChR α subunit in myasthenia gravis. *J. Neuroimmunol.* 2003; 137(1-2): 177-186.

76. Ogawa Y, Okamoto S, Mori T, Yamada M, Mashima Y, Watanabe R, Kuwana M, Tsubota K, Ikeda Y, and Oguchi Y. Autologous serum eye drops for the treatment of severe dry eye in patients with chronic graft-versus-host disease. *Bone Marrow Transplant.* 2003; 31(7): 579-583.

77. Ogawa Y, Kuwana M, Yamazaki K, Mashima Y, Yamada M, Okamoto S, Oguchi Y, and Kawakami Y. Periductal area as the primary site for T-cell activation in lacrimal gland chronic graft-versus-host disease. *Invest. Ophthalmol. Vis. Sci.* 2003; 44(5): 1888-1896.

78. Kajihara M, Kato S, Okazaki Y, Kawakami Y, Ishii H, Ikeda Y, and Kuwana M. A role of autoantibody-mediated platelet destruction in thrombocytopenia in patients with cirrhosis. *Hepatology.* 2003; 37(6): 1267-1276.

79. Kuwana M, Sato S, Kikuchi K, Kawaguchi Y, Fujisaku A, Misaki Y, Hatamochi A, Kondo H, and Takehara K. Evaluation of functional disability using the Health Assessment Questionnaire in Japanese patients with systemic sclerosis. *J. Rheumatol.*

2003; 30(6): 1253-1258.

80. Katsumata Y, Suzuki T, Kuwana M, Hattori Y, Akizuki S, Sugiura H, and Matsuoka Y. Anti-c-Mpl (thrombopoietin receptor) autoantibody-induced amegakaryocytic thrombocytopenia in a patient with systemic sclerosis. *Arthritis Rheum.* 2003; 48(6): 1647-1651.

81. Kuwana M. Autoreactive $CD4^+$ T cells to β2-glycoprotein I in patients with antiphospholipid syndrome. *Autoimmun. Rev.* 2003; 2(4): 192-198.

82. Nomura S, Kuwana M, and Ikeda Y. Induction of T-cell tolerance in a patient with idiopathic thrombocytopenic purpura by single injection of humanized monoclonal antibody to CD40 ligand. *Autoimmunity.* 2003; 36(5): 317-319.

83. Ogawa Y, and Kuwana M. Dry eye is a major complication associated with chronic graft-versus-host disease after hematopoietic stem cell transplantation. *Cornea.* 2003; 22(10): S19-S27.

84. Kuwana M, Pandey JP, Silver RM, Kawakami Y, and Kaburaki J. HLA class II alleles in systemic sclerosis patients with anti-RNA polymerase I/III antibody: associations with subunit reactivities. *J. Rheumatol.* 2003; 30(11): 2392-2397.

85. Kuwana M, Okazaki Y, Kodama H, Izumi K, Yasuoka H, Ogawa Y, Kawakami Y, and Ikeda Y. Human circulating $CD14^+$ monocytes as a source of progenitors that exhibit mesenchymal cell differentiation. *J. Leukoc. Biol.* 2003; 74(5): 833-845.

86. Suzuki S, Nogawa S, Tanaka K, Koto A, Fukuuchi Y, and Kuwana M. Initial predictors of development of pure red cell aplasia in myasthenia gravis after thymectomy. *Clin. Neurol. Neurosurg.* 2003; 106(1): 16-18.

87. Yasuoka H, Ihn H, Medsger TA Jr, Hirakata M, Kawakami Y, Ikeda Y, and Kuwana M. A novel protein highly expressed in testis is overexpressed in systemic sclerosis fibroblasts and targeted by autoantibodies. *J. Immunol.* 2003; 171(12): 6883-6890.

88. Sato S, Ohosone Y, Suwa A, Yasuoka H, Nojima T, Fujii T, Kuwana M, Nakamura K, Mimori T, and Hirakata M. Effect of intermittent cyclical etidronate therapy on corticosteroid-induced osteoporosis in Japanese patients with connective tissue disease: 3-year followup. *J. Rheumatol.* 2003; 30(12): 2673-2679.

89. Kuwana M, Nomura S, Fujimura K, Nagasawa T, Muto Y, Kurata Y, Tanaka S, and Ikeda Y. The effect of a single injection of humanized anti-CD154 monoclonal antibody on the platelet-specific autoimmune response in patients with immune thrombocytopenic purpura. *Blood.* 2004; 103(4): 1229-1236.

90. Satoh T, Pandey JP, Okazaki Y, Yasuoka H, Kawakami Y, Ikeda Y, and Kuwana M. Single nucleotide polymorphisms of the inflammatory cytokine genes in adults with

chronic immune thrombocytopenic purpura. *Br. J. Haematol.* 2004; 124(6): 796-801.

91. Kobayashi H, Hosono O, Iwata S, Kawasaki H, Kuwana M, Tanaka H, Dang NH, and Morimoto C. The tetraspanin CD9 is preferentially expressed on the human $CD4^+CD45RA^+$ naïve T cell population and is involved in T cell activation. *Clin. Exp. Immunol.* 2004; 137(1): 101-108.

92. Kuwana M, Okazaki Y, Yasuoka H, Kawakami Y, and Ikeda Y. Defective vasculogenesis in systemic sclerosis. *Lancet.* 2004; 364(9434): 603-610.

93. Kuwana M. β_2-glycoprotein I: antiphospholipid syndrome and T-cell reactivity. *Thromb. Res.* 2004; 114(5-6): 347-355.

94. Yasuoka H, Okazaki Y, Kawakami Y, Hirakata M, Inoko H, Ikeda Y, and Kuwana M. Autoreactive $CD8^+$ cytotoxic T lymphocytes to major histocompatibility complex class I chain-related molecule A in patients with Behçet's disease. *Arthritis Rheum.* 2004; 50(11): 3658-3662.

95. Ioannidis JPA, Vlachoyiannopoulos PG, Haidich AB, Medsger TA Jr, Lucas M, Michet CJ, Kuwana M, Yasuoka H, van den Hoogen F, te Boome L, van Laar JM, Verbeet NL, Cerinic MM, Georgountzos A, and Moutsopoulos HM. Mortality in systemic sclerosis: an international meta-analysis of individual patient data. *Am. J. Med.* 2005; 118(1): 2-10.

96. Satoh T, Kimura K, Okano Y, Hirakata M, Kawakami Y, and Kuwana M. Lack of circulating autoantibodies to bone morphogenetic protein receptor-II or activin receptor-like kinase 1 in mixed connective tissue disease patients with pulmonary arterial hypertension. *Rheumatology.* 2005; 44(2): 192-196.

97. Kuwana M, Matsuura E, Kobayashi K, Okazaki Y, Kaburaki J, Ikeda Y, and Kawakami Y. Binding of β_2-glycoprotein I to anionic phospholipids facilitates processing and presentation of a cryptic epitope that activates pathogenic autoreactive T cells. *Blood.* 2005; 105(4): 1552-1557.

98. Hirakata M, Suwa A, Kuwana M, Sato S, Mimori T, and Hardin JA. Association between autoantibodies to the Ku protein and DPB1. *Arthritis Rheum.* 2005; 52(2): 668-669.

99. Fujimura K, Kuwana M, Kurata Y, Imamura M, Harada H, Sakamaki H, Teramura M, Koda K, Nomura S, Sugihara S, Shimomura T, Fujimoto T, Oyashiki K, and Ikeda Y. Is eradication therapy useful as the first line of treatment in *Helicobacter pylori*-positive idiopathic thrombocytopenic purpura? Analysis of 207 eradicated chronic ITP cases in Japan. *Int. J. Haematol.* 2005; 81(2): 162-168.

100. Kuwana M, and Ikeda Y. The role of autoreactive T-cells in the pathogenesis of ITP. *Int. J. Hematol.* 2005; 81(2): 106-112.

101. Sato N, Kamata T, Akiyama N, Kuwana M, and Kanda T. Acute inflammatory

sensorimotor polyradiculoneuropathy associated with immune thrombocytopenic purpura. *J. Intern. Med.* 2005; 257(5): 473-477.

102. Hudson LL, Rocca KM, Kuwana M, and Pandey JP. Interleukin-10 genotypes are associated with systemic sclerosis and influence disease-associated autoimmune responses. *Genes Immun.* 2005; 6(3): 274-278.

103. Sato S, Hirakata M, Kuwana M, Suwa A, Inada S, Mimori T, Nishikawa T, Oddis CV, and Ikeda Y. Autoantibodies to a 140-kD polypeptide, CADM-140, in Japanese patients with clinically amyopathic dermatomyositis. *Arthritis Rheum.* 2005; 52(5): 1571-1576.

104. Okada T, Noji S, Goto Y, Iwata T, Fujita T, Okada T, Matsuzaki Y, Kuwana M, Hirakata M, Horii A, Matsuno S, Sunamura M, and Kawakami Y. Immune responses to DNA mismatch repair enzymes hMSH2 and hPMS1 in patients with pancreatic cancer, dermatomyositis and polymyositis. *Int. J. Cancer.* 2005; 116(6): 925-933.

105. Suzuki S, Shimoda M, Kawamura M, Sato H, Nogawa S, Tanaka K, Suzuki N, and Kuwana M. Myasthenia gravis accompanied by alopecia areata: clinical and immunogenetic aspects. *Eur. J. Neurol.* 2005; 12(7): 566-570.

106. Kuwana M, Okano Y, Pandey JP, Silver RM, Fertig N, and Medsger TA Jr. Enzyme-linked immunosorbent assay for detection of anti-RNA polymerase III antibody: analytical accuracy and clinical associations in systemic sclerosis. *Arthritis Rheum.* 2005; 52(8): 2425-2432.

107. Satoh T, Okano T, Matsui T, Watabe H, Ogasawara T, Kubo K, Kuwana M, Fertig N, Oddis CV, Kondo H, and Akahoshi T. Novel autoantibodies against 7SL RNA in patients with polymyositis/dermatomyositis. *J. Rheumatol.* 2005; 32(9): 1727-1733.

108. Kuwana M, Okazaki Y, Satoh T, Asahi A, Kajihara M, and Ikeda Y. Initial laboratory findings useful for predicting the diagnosis of idiopathic thrombocytopenic purpura. *Am. J. Med.* 2005; 118(9): 1026-1033.

109. Sato S, Hirakata M, Kuwana M, Nakamura K, Suwa A, Inada S, Mimori T, and Ikeda Y. Clinical characteristics of Japanese patients with anti-PL-7 (anti-threonyl-tRNA synthetase) autoantibodies. *Clin Exp Rheumatol.* 2005; 23(5): 609-615.

110. Ogawa Y, Kodama H, Kameyama K, Yamazaki K, Yasuoka H, Okamoto S, Inoko H, Kawakami Y, and Kuwana M. Donor fibroblast chimerism in the lacrimal gland of human chronic graft-versus-host disease. *Invest. Ophthalmol. Vis. Sci.* 2005; 46(12): 4519-4527.

111. Suzuki S, Satoh T, Yasuoka H, Hamaguchi Y, Tanaka K, Kawakami Y, Suzuki N, and Kuwana M. Novel autoantibodies to a voltage-gated potassium channel $K_V1.4$ in a severe form of myasthenia gravis. *J. Neuroimmunol.* 2005; 170(1-2): 141-149.

112. Kodama H, Inoue T, Watanabe R, Yasuoka H, Kawakami Y, Ogawa S, Ikeda Y,

Mikoshiba K, and Kuwana M. Cardiomyogenic potential of mesenchymal progenitors derived from human circulating $CD14^+$ monocytes. *Stem Cells Dev.* 2005; 14(6): 676-686.

113. Nakamura M, Tanaka Y, Satoh T, Kawai M, Hirakata M, Kaburaki J, Kawakami Y, Ikeda Y, and Kuwana M. Autoantibody to CD40 ligand in systemic lupus erythematosus: association with thrombocytopenia, but not thromboembolism. *Rheumatology.* 2006; 45(2): 150-156.

114. Kodama H, Inoue T, Watanabe R, Yasutomi D, Kawakami Y, Ogawa S, Mikoshiba K, Ikeda Y, and Kuwana M. Neurogenic potential of progenitors derived from human circulating $CD14^+$ monocytes. *Immunol. Cell Biol.* 2006; 84(2): 209-217.

115. Kuwana M, Kaburaki J, Okazaki Y, Yasuoka H, Kawakami Y, and Ikeda Y. Increase in circulating endothelial precursors by atorvastatin in patients with systemic sclerosis. *Arthritis Rheum.* 2006; 54(6): 1946-1951.

116. Namboodiri AM, Rocca KM, Kuwana M, and Pandey JP. Antibodies to human cytomegalovirus protein UL83 in systemic sclerosis. *Clin. Exp. Rheumatol.* 2006; 24(2): 176-178.

117. Kuwana M, Kaburaki J, Okazaki Y, Miyazaki H, and Ikeda Y. Two types of autoantibody-mediated thrombocytopenia in patients with systemic lupus erythematosus. *Rheumatology.* 2006; 45(7): 851-854.

118. Kuwana M, Kurata Y, Fujimura K, Fujisawa K, Wada H, Nagasawa T, Nomura S, Kojima T, Yagi H, and Ikeda Y. Preliminary laboratory-based diagnostic criteria for immune thrombocytopenic purpura: Evaluation by multi-center prospective study. *J. Thromb. Haemost.* 2006; 4(9): 1936-1943.

119. Ohnishi Y, Tsutsumi A, Matsumoto I, Goto D, Ito S, Kuwana M, Uemura Y, Nishimura Y, and Sumida T. Altered peptide ligands control type II collagen-reactive T cells from rheumatoid arthritis patients. *Mod. Rheumatol.* 2006; 16(4): 226-228.

120. Yamazaki R, Kuwana M, Mori T, Okazaki Y, Kawakami Y, Ikeda Y, and Okamoto S. Prolonged thrombocytopenia after allogeneic haematopoietic stem cell transplantation: Associations with impaired platelet production and increased platelet turnover. *Bone Marrow Transplant.* 2006; 38(5): 377-384.

121. Kuwana M. Potential benefit of statins for vascular disease in systemic sclerosis. *Curr. Opinion Rheumatol.* 2006; 18(5): 594-600.

122. Asahi A, Kuwana M, Suzuki H, Hibi T, Kawakami Y, and Ikeda Y. Effects of *Helicobacter pylori* eradication regimen on anti-platelet autoantibody response in infected and uninfected patients with idiopathic thrombocytopenic purpura. *Haematologica.* 2006; 91(10): 1436-1437.

123. Kuwana M, and Ikeda Y. *Helicobacter pylori* and immune thrombocytopenic purpura: unsolved questions and controversies. *Int. J. Hematol.* 2006; 84(4): 309-315.

124. Kuwana M, Okazaki Y, Kodama H, Satoh T, Kawakami Y, and Ikeda Y. Endothelial differentiation potential of human monocyte-derived multipotential cells. *Stem Cells.* 2006; 24(12): 2733-2743.

125. Kajihara M, Okazaki Y, Kato S, Ishii H, Kawakami Y, Ikeda Y, and Kuwana M. Evaluation of platelet kinetics in patients with liver cirrhosis: Similarity to idiopathic thrombocytopenic purpura. *J. Gastroenterol. Hepatol.* 2007; 22(1): 112-118.

126. Takahashi H, Amagai M, Tanikawa A, Suzuki S, Ikeda Y, Nishikawa T, Kawakami Y, and Kuwana M. T helper 2-biased natural killer cell phenotype in patients with pemphigus vulgaris. *J. Invest. Dermatol.* 2007; 127(2): 324-330.

127. Nagata E, Hamada J, Shimizu T, Shibata M, Suzuki S, Osada T, Takaoka R, Kuwana M, and Suzuki N. Altered levels of serotonin in lymphoblasts derived from migraine patients. *Neurosci. Res.* 2007; 57(2): 179-183.

128. Yasuoka H, and Kuwana M. Autoantibody response against a novel testicular antigen protein highly expressed in testis (PHET) in SSc patients. *Autoimmun Rev.* 2007 ;6(4): 228-231.

129. Ogawa Y, Razzaque MS, Kameyama K, Hasegawa G, Shimmura S, Kawai M, Okamoto S, Ikeda Y, Tsubota K, Kawakami Y, and Kuwana M. Role of heat shock protein 47, a collagen-binding chaperon, in lacrimal gland pathology in patients with cGVHD. *Invest. Ophthalmol. Vis. Sci.* 2007 ;48(3): 1079-1086.

130. Sato S, Kuwana M, and Hirakata M. Clinical characteristics of Japanese patients with anti-OJ (anti-isoleucyl-tRNA synthetase) autoantibodies. *Rheumatology.* 2007; 46(5): 842-845.

131. Matsushita T, Hasegawa M, Fujimoto M, Hamaguchi Y, Komura K, Hirano T, Horikawa M, Kondo M, Orito H, Kaji K, Saito Y, Matsushita Y, Kawara S, Yasui M, Seishima M, Ozaki S, Kuwana M, Ogawa F, Sato S, and Takehara K. Clinical evaluation of anti-aminoacyl tRNA synthetase antibodies in Japanese patients with dermatomyositis. *J. Rheumatol.* 2007; 34(5): 1012-1018.

132. Seta N, and Kuwana M. Human circulating monocytes as multipotential progenitors. *Keio J. Med.* 2007; 56(2): 41-47.

133. Kuwana M, Iki S, and Urabe A. The role of autoantibody-producing plasma cells in immune thrombocytopenic purpura refractory to rituximab. *Am. J. Hematol.* 2007; 82(9): 846-848.

134. Suzuki S, Utsugisawa K, Nagane Y, Satoh T, Terayama Y, Suzuki N, and Kuwana M.

Classification of myasthenia gravis based on autoantibody status. *Arch. Neurol.* 2007; 64(8): 1121-1124.

135. Nishimagi E, Tochimoto A, Kawaguchi Y, Satoh T, Kuwana M, Takagi K, Ichida H, Kanno T, Soejima M, Baba S, Kamatani N, and Hara M. Characteristics of patients with early systemic sclerosis and severe gastrointestinal involvement. *J. Rheumatol.* In press.

136. Kobayashi K, Tada K, Itabe H, Ueno T, Liu PH, Tsutsumi A, Kuwana M, Yasuda T, Shoenfeld Y, de Groot PG, and Matsuura E. Distinguished effects of antiphospholipid antibodies and anti-oxidized LDL antibodies on oxidized LDL uptake by macrophages. *Lupus.* In press.

137. Yamaguchi Y, Seta N, Kaburaki J, Kobayashi K, Matsuura E, and Kuwana M. Excessive exposure to anionic surfaces maintains autoantibody response to β_2-glycoprotein I in patients with antiphospholipid syndrome. *Blood.* In press.

138. Sato S, Katsuki Y, Kimura N, Kaneko Y, Suwa A, Hirakata M, and Kuwana M. Long-term effect of intermittent cyclical etidronate therapy on corticosteroid-induced osteoporosis in Japanese connective tissue disease patients: seven year follow-up. *J. Rheumatol.* In press.

139. Hamaguchi Y, Hasegawa M, Fujimoto M, Matsushita T, Komura K, Kaji K, Kondo M, Nishijima C, Hayakawa I, Ogawa F, Kuwana M, Takehara K, and Sato S. The clinical relevance of serum antinuclear antibodies in Japanese patients with systemic sclerosis. *Br. J. Dermatol.* In press.